Bruhat Bengaluru
Mahanagara Palike

BRUHAT BENGALURU MAHANAGARA PALIKE (BBMP)

ESTIMATE

NAME OF WORK: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

ESTIMATE AMOUNT RS:- 20000000.00

BRUHAT BENGALURU MAHANAGARA PALIKE

BYATARAYANAPURA

NAME OF WORK: Improvements to Roads and Drains at Hegadenagara Western Side Balance Cross Roads in Ward no: 06 Bytarayanapura Sub Division.

Job no:- | Est .Cost Rs. | 200.00 | Lakhs

Sl No	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
1	**Removing and resetting of footpath slab**								
	For Covering Slabs	Sqm							
	1st cross		2	455.00	0.90		819.00		
	2nd cross		2	455.00	0.90		819.00		
	3rd cross		2	330.00	0.90		594.00		
	5th cross, 2nd Main Road		2	200.00	0.90		360.00		
	10th cross, 2nd Main Road		2	230.00	0.90		414.00		
	Cross Road		2	63.00	0.90		113.40		
							3119.40		
	10% missing Covering Slabs						**311.94**		
							2807.46	**235.00**	**659753.00**
	Approved Rate	235.00							
		235.00							
2	**Removing and resetting of kerb stones**								
	Kerb Stone	Mtr							
	1st cross		2	455.00			910.00		
	2nd cross		2	455.00			910.00		
	3rd cross		2	330.00			660.00		
	5th cross, 2nd Main Road		2	200.00			400.00		
	10th cross, 2nd Main Road		2	230.00			460.00		
	Cross Road		2	63.00			126.00		
							3466.00		
	10% Damaged / Broken Kerbs						**346.60**		
							3119.40	**118.00**	**368089.00**
	Basic Rate	118.00							
		118.00							
3	**Earth work excavation by manual means for drains,canals and similar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Page No. 7/ Item No. 1.4.1/ PWD SR 2021-22 (Vol-I)**								
	Desilting	Cum							
	1st cross		1	455.00	0.60	0.30	81.90		
	2nd cross		1	455.00	0.60	0.30	81.90		
	3rd cross		1	330.00	0.60	0.30	59.40		
	5th cross, 2nd Main Road		1	200.00	0.60	0.30	36.00		
	10th cross, 2nd Main Road		1	230.00	0.60	0.30	41.40		
	Cross Road		1	63.00	0.60	0.30	11.34		

	Job no:-					Est .Cost Rs.	200.00	Lakhs
Sl No	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
							311.94	**334.40**	**104312.00**
	Basic Rate	186.00							
	Loading and Unloading	118.00							
	Area Weightage @ 10%	30.40							
		334.40							
4	**Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work ((V-I, P.No-8, I No-1.12 of PWD SR 2021-22)**								
	Earth work excavation	Cum							
	3rd cross		1	330.00	7.00	0.30	693.00		
	5th cross, 2nd Main Road		1	200.00	6.00	0.30	360.00		
	10th cross, 2nd Main Road		1	230.00	7.50	0.30	517.50		
	Cross Road		1	63.00	7.00	0.30	132.30		
							1702.80	**71.50**	**121750.00**
	Basic Rate	65.00							
	Area Weightage @ 10%	6.50							
	Total	**71.50**							
5	**Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Page No. 24/ Item No. 4.27/ PWD SR 2021-22 (Vol-III).**								
	Wet Mix	Cum							
	1st cross		2	455.00	1.20	0.23	251.16		
	2nd cross		2	455.00	1.20	0.23	251.16		
	3rd cross		1	330.00	7.00	0.23	531.30		
	5th cross, 2nd Main Road		1	200.00	6.00	0.23	276.00		
	10th cross, 2nd Main Road		1	230.00	7.50	0.23	396.75		
	Cross Road		1	63.00	7.00	0.23	101.43		
							1807.80	**2633.40**	**4760660.00**
	Basic Rate	2394.00							
	Area Weightage @ 10%	239.40							
	Total	**2633.40**							
6	**Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means. (P.No.29 It.No.5.1, PWD SR 2021-22 (Vol-III))**								
	Prime coat	Sqm							
	1st cross		2	455.00	1.20		1092.00		
	2nd cross		2	455.00	1.20		1092.00		
	3rd cross		1	330.00	7.00		2310.00		
	5th cross, 2nd Main Road		1	200.00	6.00		1200.00		
	10th cross, 2nd Main Road		1	230.00	7.50		1725.00		
	Cross Road		1	63.00	7.00		441.00		

Sl No	Job no:- / Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. / Qty	200.00 / Rate	Lakhs / Amount
							7860.00	**48.40**	**380424.00**
	Basic Rate	44.00							
	Area Weightage @ 10%	4.40							
	Final Rate	**48.40**							
7	**Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.20 kg/m2 on the prepared bituminous surface cleaned with mechanical broom (P.No.29 It.No.5.3, PWD SR 2021-22 (Vol-III))**								
	Tack coat	Sqm							
	1st cross		1	455.00	6.00		2730.00		
	2nd cross		1	455.00	7.00		3185.00		
	3rd cross		1	330.00	7.00		2310.00		
	5th cross, 2nd Main Road		1	200.00	6.00		1200.00		
	10th cross, 2nd Main Road		1	230.00	7.50		1725.00		
	Cross Road		1	63.00	7.00		441.00		
							11591.00	**13.20**	**153001.00**
	Basic Rate	12.00							
	Area Weightage @ 10%	1.20							
	Final Rate	**13.20**							
8	**Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects.(Grade-II) (Pg:33, It.No-5.12 C PWD SR:2021-22 (Vol-III))**								
	Dense Graded Bituminous Mecadam (DBM)	Cum							
	1st cross		1	455.00	6.00	0.05	136.50		
	2nd cross		1	455.00	7.00	0.05	159.25		
							295.75		
				Twenty percent for Profile Correction			**59.15**		
	3rd cross		1	330.00	7.00	0.05	115.50		
	5th cross, 2nd Main Road		1	200.00	6.00	0.05	60.00		
	10th cross, 2nd Main Road		1	230.00	7.50	0.05	86.25		
	Cross Road		1	63.00	7.00	0.05	22.05		
							283.80		
							342.95	**10877.90**	**3730575.00**
	Basic Rate	9889.00							
	Area Weightage @ 10%	988.90							
	Final Rate	**10877.90**							
9	**Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using Crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respec (Pg:36, It.No-5.16 C PWD SR:2021-22 (Vol-III))**								
	Bituminous Concrete (BC)	Cum							
	1st cross		1	455.00	6.00	0.04	109.20		
	2nd cross		1	455.00	7.00	0.04	127.40		

	Job no:-					Est .Cost Rs.		200.00	Lakhs
Sl No	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
	3rd cross		1	330.00	7.00	0.04	92.40		
	5th cross, 2nd Main Road		1	200.00	6.00	0.04	48.00		
	10th cross, 2nd Main Road		1	230.00	7.50	0.04	69.00		
	Cross Road		1	63.00	7.00	0.04	17.64		
							463.64	**12684.10**	**5880856.00**
	Basic Rate	11531.00							
	Area Weightage @ 10%	1,153.10							
	Final Rate	**12684.10**							
10	**Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes. Page No. 57/ Item No. 8.15 PWD SR 2021-22 (Vol-III).**								
	Road Marking	Sqm							
	1st cross		2	455.00	0.10		91.00		
	2nd cross		2	455.00	0.10		91.00		
	3rd cross		2	330.00	0.10		66.00		
	5th cross, 2nd Main Road		2	200.00	0.10		40.00		
	10th cross, 2nd Main Road		2	230.00	0.10		46.00		
	Cross Road		2	63.00	0.10		12.60		
							346.60	**525.80**	**182242.00**
	Basic Rate	478.00							
	Area Weightage @ 10%	47.80							
	Total	**525.80**							
11	**Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate**								
	Precast slabs	Nos							
	10% missing Covering Slabs						**311.94**		
							311.94	**2072.00**	**646339.00**
	Basic Rate	2072.00							
	Total	**2072.00**							
12	**Providing and fixing pre cast solid cement concrete kerb stones made out of M20 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete as directed by the Engineer in Charge of the work (Approved Rate)**								
	Kerb Stones	Nos							
	10% Damaged / Broken Kerbs						**346.60**		
							770.00	**507.00**	**390390.00**
	Basic Rate	507.00							
	Total	**507.00**							
13	**Cost of Haulage Excluding Loading and Unloading Taking output 25 t load and lead 10 km = 250 t.km (Vol-III) Page No.3, Item No.1.4C of PWD SR 2021-22**								
	Cost of Haulage	Mtr							

	Job no:-						Est .Cost Rs.	200.00	Lakhs
Sl No	Description of Items	Unit	No			D (M)	Qty	Rate	Amount
	Qty frm Item No-3						311.94		
	Qty frm Item No-4						1702.80		
							2578.87	44.00	113470.00
	Basic Rate	5.00							
	8KM Lead = 5*8	40.00							
	Area Weightage 10%	4.00							
	Total Rate	**44.00**							
	Sub Total								17491861.00
	GST 12.0%								2099023.32
	For DPR and PMC Charges 2.0%								400000.00
	Sub Total								19990884.32
	Miscellaneous								9115.68
	Total								20000000.00

CERTIFICATE

1 The Work spot has been inspected and the work found to be necessary

2 The Estimate is prepared as per the PWD SR 2021-22 (Vol-I and Vol-III)

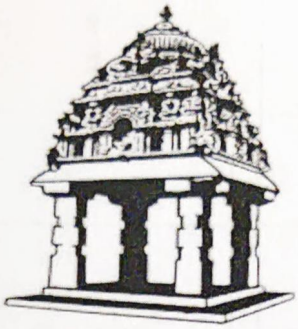
3 The Provision made in estimate are adequate and essential

4 This area comes under
BBMP limits.

Assistant Engineer
Ward No:06
BBMP

Asst Executive Engineer
Basavanagudi Sub-Division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP



Bruhat Bengaluru Mahanagara Palike

BRUHAT BENGALURU MAHANAGARA PALIKE (BBMP)

ESTIMATE

NAME OF WORK: Improvements to Roads and Drains at Hegadenagara Eastern Side Roads in Ward no: 06 Bytarayanapura Sub Division.

ESTIMATE AMOUNT RS:- 20000000.00

BRUHAT BENGALURU MAHANAGARA PALIKE

BYATARAYANAPURA

NAME OF WORK: Improvements to Roads and Drains at Hegadenagara Eastern Side Roads in Ward no: 06 Bytarayanapura Sub Division.

Job no:-

Sl No	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Est .Cost Rs. 200.00 Lakhs Rate	Amount
1	**Removing and resetting of footpath slab**								
	For Covering Slabs	Sqm							
	Ex service man Layout, Main Road (W0074)								
	RHS		1	304.80	0.90		274.32		
	LHS		1	304.80	0.90		274.32		
	Shabri nagar main road (W0084)								
	RHS		1	67.20	0.90		60.48		
	From Ganesh Temple Road		1	55.40	0.90		49.86		
	Towards Dead End		1	124.10	0.90		111.69		
	LHS								
	From Ganesh Temple Road		1	37.00	0.90		33.30		
	Towards Dead End		1	98.40	0.90		88.56		
	5th Cross Road (W0175)								
	RHS		1	45.80	0.90		41.22		
	LHS		1	45.80	0.90		41.22		
	6th Cross Road (W0197)								
	RHS		1	45.50	0.90		40.95		
	LHS		1	45.50	0.90		40.95		
	7th Cross Road (W0199)								
	RHS		1	45.70	0.90		41.13		
	LHS		1	45.70	0.90		41.13		
	8th Cross Road (W0084)								
	RHS		1	47.50	0.90		42.75		
	LHS		1	47.50	0.90		42.75		
							1224.63		
	5% Missing Slabs						**61.23**		
							1163.00	**246.70**	**286912.00**
2	**Earth work excavation by manual means for drains,canals and similar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Page No. 7/ Item No. 1.4.1/ PWD SR 2021-22 (Vol-I)**								
	Drain Desilting	Cum							
	Ex service man Layout, Main Road (W0074)								
	RHS		1	304.80	0.60	0.45	82.30		
	LHS		1	304.80	0.60	0.45	82.30		
	Shabri nagar main road (W0084)								
	RHS		1	67.20	0.60	0.45	18.14		
	From Ganesh Temple Road		1	55.40	0.60	0.45	14.96		
	Towards Dead End		1	124.10	0.60	0.40	29.78		
	LHS								
	From Ganesh Temple Road		1	31.40	0.60	0.50	9.42		
			1	5.60	0.60	0.55	1.85		
	Towards Dead End		1	20.00	0.60	0.50	6.00		
			1	30.00	0.60	0.55	9.90		
			1	99.80	0.60	0.60	35.93		
	5th Cross Road (W0175)								
	RHS		1	45.80	0.60	0.50	13.74		
	LHS		1	45.80	0.60	0.55	15.11		
	6th Cross Road (W0197)								

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	Est .Cost Rs. D (M)	Qty	200.00 Rate	Lakhs Amount
	RHS		1	45.50	0.60	0.50	13.65		
	LHS		1	15.00	0.60	0.35	3.15		
	7th Cross Road (W0199)		1	30.50	0.60	0.40	7.32		
	RHS		1	30.00	0.60	0.40	7.20		
			1	15.70	0.60	0.60	5.65		
	LHS		1	45.70	0.60	0.60	16.45		
	8th Cross Road (W0084)								
	RHS		1	47.50	0.60	0.60	17.10		
	LHS		1	47.50	0.60	0.60	17.10		
	Shabri Nagar 1st main Cross road 2A (W0096)								
	RHS		1	48.00	0.60	0.60	17.28		
	LHS		1	48.00	0.60	0.60	17.28		
	Shabri Nagar 1st main Cross road 2B (W0094)								
	RHS		1	36.30	0.60	0.60	13.07		
	LHS		1	36.30	0.60	0.60	13.07		
	Shabri Nagar 1st main Cross road 2C (W0092)								
	RHS		1	40.50	0.60	0.60	14.58		
	LHS		1	40.50	0.60	0.60	14.58		
	New RCC Drain Work	Cum							
	New Shanthi Nagar Main Rad								
	1st Cross Road (W0135)		1	65.00	0.90	1.05	61.43		
	2nd Cross Road (W0143)		1	63.00	0.90	1.05	59.54		
	3rd Cross Road (W0147)		1	59.00	0.90	1.05	55.76		
	4th Cross Road (W0151)		1	59.00	0.90	1.05	55.76		
	5th Cross Road (W0163)		1	55.30	0.90	1.05	52.26		
	New Culverts								
	1st Cross Road (W0135)		1	5.20	1.50	1.20	9.36		
	2nd Cross Road (W0143)		1	5.40	1.50	1.20	9.72		
	3rd Cross Road (W0147)		1	4.00	1.50	1.20	7.20		
	4th Cross Road (W0151)		1	4.20	1.50	1.20	7.56		
	5th Cross Road (W0163)		1	4.80	1.50	1.20	8.64		
							824.12	**351.05**	**289306.00**
3	**Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately (Page No.15 & Item No.2.1.2)PWD SR 2021-22 (Vol-III)**								
	PCC 1:4:`8	Cum							
	New Shanthi Nagar Main Rad								
	1st Cross Road (W0135)								
	1st Cross Road (W0135)		1	65.00	0.90	0.15	8.78		
	2nd Cross Road (W0143)		1	63.00	0.90	0.15	8.51		
	3rd Cross Road (W0147)		1	59.00	0.90	0.15	7.97		
	4th Cross Road (W0151)		1	59.00	0.90	0.15	7.97		
	5th Cross Road (W0163)		1	55.30	0.90	0.15	7.47		
	New Culverts								
	1st Cross Road (W0135)		1	5.20	1.50	0.15	1.17		
	2nd Cross Road (W0143)		1	5.40	1.50	0.15	1.22		
	3rd Cross Road (W0147)		1	4.00	1.50	0.15	0.90		
	4th Cross Road (W0151)		1	4.20	1.50	0.15	0.95		
	5th Cross Road (W0163)		1	4.80	1.50	0.15	1.08		

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	200.00 Rate	Lakhs Amount
4	**Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) (Page 15/2.2.1.1) PWD SR 2021-22 (Vol-I)**						45.99	6413.65	294934.00
	RCC M20	Cum							
	Drain Raft								
	New RCC Drain Work								
	New Shanthi Nagar Main Rad								
	1st Cross Road (W0135)		1	65.00	0.75	0.15	7.31		
	2nd Cross Road (W0143)		1	63.00	0.75	0.15	7.09		
	3rd Cross Road (W0147)		1	59.00	0.75	0.15	6.64		
	4th Cross Road (W0151)		1	59.00	0.75	0.15	6.64		
	5th Cross Road (W0163)		1	55.30	0.75	0.15	6.22		
	New Culverts								
	1st Cross Road (W0135)		1	5.20	1.20	0.15	0.94		
	2nd Cross Road (W0143)		1	5.40	1.20	0.15	0.97		
	3rd Cross Road (W0147)		1	4.00	1.20	0.15	0.72		
	4th Cross Road (W0151)		1	4.20	1.20	0.15	0.76		
	5th Cross Road (W0163)		1	4.80	1.20	0.15	0.86		
	Drain wall								
	New RCC Drain Work								
	New Shanthi Nagar Main Rad								
	1st Cross Road (W0135)		2	65.00	0.15	0.60	11.70		
	2nd Cross Road (W0143)		2	63.00	0.15	0.60	11.34		
	3rd Cross Road (W0147)		2	59.00	0.15	0.60	10.62		
	4th Cross Road (W0151)		2	59.00	0.15	0.60	10.62		
	5th Cross Road (W0163)		2	55.30	0.15	0.60	9.95		
	New Culverts								
	1st Cross Road (W0135)		2	5.20	0.25	0.75	1.95		
	2nd Cross Road (W0143)		2	5.40	0.25	0.75	2.03		
	3rd Cross Road (W0147)		2	4.00	0.25	0.75	1.50		
	4th Cross Road (W0151)		2	4.20	0.25	0.75	1.58		
	5th Cross Road (W0163)		2	4.80	0.25	0.75	1.80		
					Total QTY		**101.23**		
							101.23	**7236.31**	**732518.00**
5	**Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.(V-III, I.No 13.1 Page No 99, PWD SR 2021-22)**								

TMT Steel FE500	Ton							
Description	**Dia In MM**	**No**	**Length in M**	**8 MM**	**10 MM**	**12 MM**	**16 MM**	
SPACING - 0.15 M								
FOR DRAINS								
New Shanthi Nagar Main Road								
1st Cross Road (W0135)								
10mm Main	**10Ø**	**861.00**	**2.10**		**1808.10**			
8mm Dis	**8Ø**	**29.00**	**64.50**	**1870.50**				
2nd Cross Road (W0143)								
10mm Main	**10Ø**	**835.00**	**2.10**		**1753.50**			
8mm Dis	**8Ø**	**29.00**	**62.50**	**1812.50**				
3rd Cross Road (W0147)								
10mm Main	**10Ø**	**787.00**	**2.10**		**1652.70**			
8mm Dis	**8Ø**	**29.00**	**59.00**	**1711.00**				

Sl No	Job no:-					Est .Cost Rs.	200.00	Lakhs
	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
	4th Cross Road (W0151)								
	10mm Main	10Ø	761.00	2.10		1598.10			
	8mm Dis	8Ø	29.00	57.00	1653.00				
	5th Cross Road (W0163)								
	10mm Main	10Ø	739.00	2.10		1551.90			
	8mm Dis	8Ø	29.00	55.30	1603.70				
	CULVERTS								
	SPACING - 0.15 M								
	1st Cross Road (W0135)								
	12mm Main	12Ø	71.00	5.00			355.00		
	10mm Dis	10Ø	67.00	5.20		348.40			
	2nd Cross Road (W0143)								
	12mm Main	12Ø	73.00	5.00			365.00		
	10mm Dis	10Ø	67.00	5.40		361.80			
	3rd Cross Road (W0147)								
	12mm Main	12Ø	55.00	5.00			275.00		
	10mm Dis	10Ø	67.00	4.00		268.00			
	4th Cross Road (W0151)								
	12mm Main	12Ø	57.00	5.00			285.00		
	10mm Dis	10Ø	67.00	4.20		281.40			
	5th Cross Road (W0163)								
	12mm Main	12Ø	65.00	5.00			325.00		
	10mm Dis	10Ø	67.00	4.80		321.60			
					8650.70	9945.50	1605.00		
	CALCULATIONS								
	Calculations	8Ø	######	0.395	3417.03				
		10Ø	######	0.617	6136.37				
		12Ø	######	0.888	1425.24				
		16Ø	0.00	1.580	0.00				
				Total	10978.64	Kg/m			
						Total	10.98	106436.07	1168523.00
6	**Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate**								
	Covering Slab for New RCC Drains	Sqm							
	New Shanthi Nagar Main Rad								
	1st Cross Road (W0135)		1	65.00	0.75		48.75		
	2nd Cross Road (W0143)		1	63.00	0.75		47.25		
	3rd Cross Road (W0147)		1	59.00	0.75		44.25		
	4th Cross Road (W0151)		1	59.00	0.75		44.25		
	5th Cross Road (W0163)		1	55.30	0.75		41.48		
	Missing Slabs		1	108.20	0.90		97.38		
							323.36	2175.19	703358.00
7	**Providing and fixing RCC precast cover slab of 230mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)**								
	Covering Slab for Culverts	Sqm							
	1st Cross Road (W0135)		1	5.20	1.20		6.24		
	2nd Cross Road (W0143)		1	5.40	1.20		6.48		
	3rd Cross Road (W0147)		1	4.00	1.20		4.80		
	4th Cross Road (W0151)		1	4.20	1.20		5.04		

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	Est .Cost Rs. D (M)	Qty	200.00 Rate	Lakhs Amount
	5th Cross Road (W0163)		1	4.80	1.20		5.76		
							28.32	**5287.84**	**149751.00**
8	**Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material by Mechanical Means using Hydraulic excavator with in all lifts and lead. Page No. 15/ Item No. 3.5/ PWD SR 2021-22 (Vol-III).**								
	Scarifying the existing bituminous road surface	Sqm							
	Ex service man Layout, Main Road (W0074)		1	304.80	6.72		2046.73		
	Shabarinagara, Main Road (W0084)		1	258.00	6.32		1631.31		
	5th Cross Road Subramanya Temple		1	85.40	6.72		573.89		
							4251.93	**4.62**	**19643.00**
9	**Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work ((V-I, P.No-8, I No-1.12 of PWD SR 2021-22)**								
	Earth work excavation (By Manual Means)	Cum							
	Ex service man Layout, Main Road (W0074)0		1	304.80	6.72	0.30	614.02		
	Shabarinagara, Main Road (W0084)		1	258.00	6.32	0.30	489.39		
	Shabarinagara, Cross Road 8 (W0084)		1	47.50	5.33	0.30	75.95		
	Shabarinagara, Cross Road 7 (W0199)		1	45.70	5.18	0.30	71.02		
	Shabarinagara, Cross Road 6 (W0197)		1	45.50	5.07	0.30	69.21		
	Shabarinagara, Cross Road 5 (W0091)		1	45.80	5.17	0.30	71.04		
	Shabri Nagar 1st main Cross road 2A (W0096)		1	50.00	6.10	0.30	91.50		
	Shabri Nagar 2nd main Cross road 2B (W0094)		1	50.00	4.65	0.30	69.75		
	Shabri Nagar 3rd main Cross road 2C (W0092)		1	47.00	5.18	0.30	73.04		
	5th Cross Road Subramanya Temple		1	85.40	6.72	0.30	172.17		
	New CC Road								
	New Shanti Nagar Cross Road 1 (W0135)		1	65.00	4.84	0.30	94.38		
	New Shanti Nagar Cross Road 2 (W0143)		1	63.00	5.25	0.30	99.23		
	New Shanti Nagar Cross Road 3 (W0147)		1	59.00	3.73	0.30	66.02		
	New Shanti Nagar Cross Road 4 (W0151)		1	59.00	3.61	0.30	63.90		
	New Shanti Nagar Cross Road 5 (W0163)		1	55.30	4.86	0.30	80.63		
							2201.23	**75.06**	**165224.00**
10	**Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Page No. 24/ Item No. 4.27/ PWD SR 2021-22 (Vol-III).**								
	Wet Mix	Cum							
	Ex service man Layout, Main Road (W0074)0		1	304.80	6.72	0.25	511.68		

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	200.00 Rate	Lakhs Amount
	Shabarinagara, Main Road (W0084)		1	258.00	6.32	0.25	407.83		
	Shabarinagara, Cross Road 8 (W0084)		1	47.50	5.33	0.25	63.29		
	Shabarinagara, Cross Road 7 (W0199)		1	45.70	5.18	0.25	59.18		
	Shabarinagara, Cross Road 6 (W0197)		1	45.50	5.07	0.25	57.67		
	Shabarinagara, Cross Road 5 (W0091)		1	45.80	5.17	0.23	54.46		
	Shabri Nagar 1st main Cross road 2A (W0096)		1	50.00	6.10	0.23	70.15		
	Shabri Nagar 2nd main Cross road 2B (W0094)		1	50.00	4.65	0.25	58.13		
	Shabri Nagar 3rd main Cross road 2C (W0092)		1	47.00	5.18	0.25	60.87		
	5th Cross Road Subramanya Temple		1	85.40	6.72	0.25	143.47		
	For UGD Cutting								
	Ex service man Layout, Main Road (W0074)		1	304.80	1.10	0.30	100.58		
	Ex service man Layout, Main Road For Water Connection Line (W0074)		1	304.80	0.90	0.30	82.30		
							1587.31	**2764.54**	**4388191.00**
11	**Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means. (P.No.29 It.No.5.1, PWD SR 2021-22 (Vol-III))**								
	Prime coat	Sqm							
	Ex service man Layout, Main Road (W0074)		1	304.80	6.72		2046.73		
	Shabarinagara, Main Road (W0084)		1	258.00	6.32		1631.31		
	5th Cross (W0091)		1	85.40	6.72		573.89		
							4251.93	**48.50**	**206218.00**
12	**Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.20 kg/m2 on the prepared bituminous surface cleaned with mechanical broom (P.No.29 It.No.5.3, PWD SR 2021-22 (Vol-III))**								
	Tack coat	Sqm							
	Ex service man Layout, Main Road (W0074)0		1	304.80	6.72		2046.73		
	Shabarinagara, Main Road (W0084)		1	258.00	6.32		1631.31		
	Shabarinagara, Cross Road 8 (W0084)		1	47.50	5.33		253.18		
	Shabarinagara, Cross Road 7 (W0199)		1	45.70	5.18		236.73		
	Shabarinagara, Cross Road 6 (W0197)		1	45.50	5.07		230.69		
	Shabarinagara, Cross Road 5 (W0091)		1	45.80	5.17		236.79		
	Shabri Nagar 1st main Cross road 2A (W0096)		1	50.00	6.10		305.00		
	Shabri Nagar 2nd main Cross road 2B (W0094)		1	50.00	4.65		232.50		
	Shabri Nagar 3rd main Cross road 2C (W0092)		1	47.00	5.18		243.46		
	5th Cross Road Subramanya Temple		1	85.40	6.72		573.89		

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	200.00 Rate	Lakhs Amount
							5990.26	13.86	83025.00
13	**Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects.(Grade-II) (Pg:33, It.No-5.12 C PWD SR:2021-22 (Vol-III))**								
	Dense Graded Bituminous Mecadam (DBM)	Cum							
	Ex service man Layout, Main Road (W0074)		1	304.80	6.72	0.05	102.34		
	Shabarinagara, Main Road (W0084)		1	258.00	6.32	0.05	81.57		
	5th Cross (W0091)		1	85.40	6.72	0.05	28.69		
							212.60	**10553.53**	**2243642.00**
14	**Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using Crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respec (Pg:36, It.No-5.16 C PWD SR:2021-22 (Vol-III))**								
	Bituminous Concrete (BC)	Cum							
	Ex service man Layout, Main Road (W0074)0		1	304.80	6.72	0.04	81.87		
	Shabarinagara, Main Road (W0084)		1	258.00	6.32	0.04	65.25		
	Shabarinagara, Cross Road 8 (W0084)		1	47.50	5.33	0.04	10.13		
	Shabarinagara, Cross Road 7 (W0199)		1	45.70	5.18	0.04	9.47		
	Shabarinagara, Cross Road 6 (W0197)		1	45.50	5.07	0.04	9.23		
	Shabarinagara, Cross Road 5 (W0091)		1	45.80	5.17	0.04	9.47		
	Shabri Nagar 1st main Cross road 2A (W0096)		1	50.00	6.10	0.04	12.20		
	Shabri Nagar 2nd main Cross road 2B (W0094)		1	50.00	4.65	0.04	9.30		
	Shabri Nagar 3rd main Cross road 2C (W0092)		1	47.00	5.18	0.04	9.74		
	5th Cross Road Subramanya Temple		1	85.40	6.72	0.04	22.96		
							239.61	**12253.37**	**2936034.00**
15	**Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes. Page No. 57/ Item No. 8.15 PWD SR 2021-22 (Vol-III).**								
	Road Marking	Sqm							
	Ex service man Layout, Main Road (W0074)0		2	304.80	0.10		60.96		
	Shabarinagara, Main Road (W0084)		2	258.00	0.10		51.60		
	Shabarinagara, Cross Road 8 (W0084)		2	47.50	0.10		9.50		
	Shabarinagara, Cross Road 7 (W0199)		2	45.70	0.10		9.14		
	Shabarinagara, Cross Road 6 (W0197)		2	45.50	0.10		9.10		
	Shabarinagara, Cross Road 5 (W0091)		2	45.80	0.10		9.16		

Sl No	Job no:- / Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	200.00 Rate	Lakhs Amount
	Shabri Nagar 1st main Cross road 2A (W0096)		2	50.00	0.10		10.00		
	Shabri Nagar 2nd main Cross road 2B (W0094)		2	50.00	0.10		10.00		
	Shabri Nagar 3rd main Cross road 2C (W0092)		2	47.00	0.10		9.40		
	5th Cross Road Subramanya Temple		2	85.40	0.10		17.08		
							195.94	**551.98**	**108154.00**
16	**Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Page No. 15/ Item No. 2.1.1/ PWD SR 2021-22 (Vol-I).**								
	PCC 1:5:10	Cum							
	New Shanti Nagar Cross Road 1 (W0135)		1	65.00	4.84	0.15	47.19		
	New Shanti Nagar Cross Road 2 (W0143)		1	63.00	5.25	0.15	49.61		
	New Shanti Nagar Cross Road 3 (W0147)		1	59.00	3.73	0.15	33.01		
	New Shanti Nagar Cross Road 4 (W0151)		1	59.00	3.61	0.15	31.95		
	New Shanti Nagar Cross Road 5 (W0163)		1	55.30	4.86	0.15	40.31		
							202.08	**5611.08**	**1133860.00**
17	**Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, , primer, sealant , curing of concrete slabs for 14- days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete. as per the directions of the Engineer-in-charge of the work. Page No. 138/ Item No. 20.29/ PWD SR 2021-22 (Vol-III).**								
	PCC M30	Cum							
	New Shanti Nagar Cross Road 1 (W0135)		1	65.00	4.84	0.15	47.19		
	New Shanti Nagar Cross Road 2 (W0143)		1	63.00	5.25	0.15	49.61		
	New Shanti Nagar Cross Road 3 (W0147)		1	59.00	3.73	0.15	33.01		
	New Shanti Nagar Cross Road 4 (W0151)		1	59.00	3.61	0.15	31.95		
	New Shanti Nagar Cross Road 5 (W0163)		1	55.30	4.86	0.15	40.31		
							202.08	**7519.93**	**1519591.00**
18	**Cost of Haulage Excluding Loading and Unloading Taking output 25 t load and lead 10 km = 250 t.km (Vol-III) Page No.3, Item No.1.4C of PWD SR 2021-22**								
	Cost of Haulage	Mtr							
	Qty frm Item No-2						**831.50**		
	Qty frm Item No-10						**2201.23**		
							3881.89	**46.19**	**179304.00**
	Sub Total								**16608188.00**

Sl No	Job no:-	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	200.00 Rate	Lakhs Amount
	GST 12.0%								**2099888.16**
	For DPR and PMC Charges 2.0%								**400000.00**
	Sub Total								**19998956.16**
	Miscellaneous								**1043.84**
	Total								**20000000.00**

CERTIFICATE

1 The Work spot has been inspected and the work found to be necessary
2 The Estimate is prepared as per the PWD SR 2021-22 (Vol-I and Vol-III)
3 The Provision made in estimate are adequate and essential
4 This area comes under
BBMP limits.

Assistant Engineer
Ward No:06
BBMP

Asst Executive Engineer
Basavanapura Sub-Division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP

Bruhat Bengaluru Mahanagara Palike

BRUHAT BENGALURU MAHANAGARA PALIKE (BBMP)

ESTIMATE

NAME OF WORK: **Improvements to Roads and Drains of Nethajinagara and Surrounding areas in Ward no: 07 Bytarayanapura.**

ESTIMATE AMOUNT RS:- 15000000.00

BRUHAT BENGALURU MAHANAGARA PALIKE

BYATARAYANAPURA

NAME OF WORK: Improvements to Roads and Drains of Nethajinagara and Surrounding areas in Ward no: 07 Bytarayanapura.

Job no:-

Sl No	Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	150.00 Rate	Lakhs Amount
1	**Removing and resetting of footpath slab**								
	For Covering Slabs	Sqm							
	Yoesh Nagara Main Road		2	650.00	0.90		1170.00		
	Yogesh Nagara, 1st Cross		1	25.00	0.90		22.50		
	Amrutahalli, 4th cross		2	100.00	0.90		180.00		
	Amrutahalli, 3rd cross		2	280.00	0.90		504.00		
	Amrutahalli, 3rd A cross		2	40.00	0.90		72.00		
	Muneshwara Gowdana Layout, 1st Main Road		2	152.00	0.90		273.60		
							2222.10		
	20% missing Covering Slabs						**444.42**		
							1777.68	**235.00**	**417754.00**
	Approved Rate	235.00							
		235.00							
2	**Removing and resetting of Kerb Stones**								
	For Kerb Stones	Mtr							
	Yoesh Nagara Main Road		2	650.00			1300.00		
	Amrutahalli, 4th cross		2	100.00			200.00		
	Amrutahalli, 3rd cross		2	280.00			560.00		
	Amrutahalli, 3rd A cross		2	40.00			80.00		
							2140.00		
	20% missing Covering Slabs						**428.00**		
							1712.00	**118.00**	**202016.00**
	Approved Rate	118.00							
		118.00							
3	**Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead (Page No.8 & Item No.2.7 I (ii) A) PWD SR 2021-22 (Vol-III)**								
	I.Lime /Cement Concrete	Cum							
	(ii) A. Cement Concrete Grade M-15 & M-20								
	Drain								
	Yogesh Nagara, 1st cross Opp Road								
	Walls		2	25.00	0.15	0.60	4.50		
	Raft		1	25.00	0.90	0.15	3.38		
							7.88	**969.10**	**7631.00**
	Basic Rate	881.00							
	Area Weightage @ 10%	88.10							
	Final Rate	**969.10**							
4	**Dismantling of cement concrete pavement by mechanical meansusing pneumatic tools, breaking to pieces not exceeding 0.02 m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separately (Page No.9 & Item No.2.19)PWD SR 2021-22 (Vol-III)**								
	Dismantling of Cement Concrete Pavement	Cum							

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	150.00 Rate	Lakhs Amount
	CC Road								
	Yogesh Nagara, 1st cross		1	25.00	3.50	0.30	26.25		
							26.25	**464.20**	**12185.00**
	Basic Rate	422.00							
	Area Weightage @ 10%	42.20							
	Final Rate	**464.20**							
5	**Dismantling of Flexible pavements and disposal of dismantled materials and stacking serviceable and unserviceable materials separately(Page No.10 & Item No.2.18 II A)PWD SR 2021-22 (Vol-III)**								
	Dismantling of Flexible Pavements II. By Mechanical Means A. Bituminous course	Cum							
	Asphalt Road								
	Yogesh Nagara, 3rd cross		1	25.00	4.50	0.10	11.25		
							11.25	**221.10**	**2487.00**
	Basic Rate	201.00							
	Area Weightage @ 10%	20.10							
	Final Rate	**221.10**							
6	**Dismantling of Flexible pavements and disposal of dismantled materials and stacking serviceable and unserviceable materials separately(Page No.9 & Item No.2.18 II B)PWD SR 2021-22 (Vol-III)**								
	Dismantling of Flexible Pavements II. By Mechanical Means B. Granular courses	Cum							
	Asphalt Road								
	Yogesh Nagara, 3rd cross		1	25.00	4.50	0.23	25.88		
							25.88	**40.70**	**1053.00**
	Basic Rate	37.00							
	Area Weightage @ 10%	3.70							
	Final Rate	**40.70**							
7	**Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material by Mechanical Means using Hydraulic excavator with in all lifts and lead. (Page No.14 & Item No.3.5) PWD SR 2021-22 (Vol-III)**								
	Scarifying the existing bituminous road surface	Sqm							
	Yoesh Nagara Main Road		1	200.00	9.50		1900.00		
							1900.00	**4.40**	**8360.00**
	Basic Rate	4.00							
	Area Weightage @ 10%	0.40							
	Final Rate	**4.40**							
8	**Earth work excavation by manual means for drains,canals and similar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Page No. 7/ Item No. 1.4.1/ PWD SR 2021-22 (Vol-I)**								
	Desilting	Cum							

Sl No	Job no:-					Est .Cost Rs.	150.00	Lakhs
	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
	Yoesh Nagara Main Road		2	650.00	0.60	0.30	234.00		
	Yogesh Nagara, 1st Cross		1	25.00	0.60	0.30	4.50		
	Amrutahalli, 4th cross		2	100.00	0.60	0.30	36.00		
	Amrutahalli, 3rd cross		2	280.00	0.60	0.30	100.80		
	Amrutahalli, 3rd A cross		2	40.00	0.60	0.30	14.40		
	Muneshwara Gowdana Layout, 1st Main Road		2	152.00	0.60	0.30	54.72		
	RCC Drain	Cum							
	Yogesh Nagara, 1st cross Opp Road		1	20.00	1.20	0.90	21.60		
	Culverts		5	7.00	1.30	0.95	43.23		
							509.25	**334.40**	**170291.00**
	Basic Rate	186.00							
	Loading and Unloading	118.00							
	Sub Total	**304.00**							
	Area Weightage @ 10%	30.40							
		334.40							
9	**Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately (Page No.15 & Item No.2.1.2)PWD SR 2021-22 (Vol-III)**								
	PCC 1:4:8	Cum							
	Yogesh Nagara, 1st cross Opp Road		1	20.00	1.20	0.15	3.60		
	Culverts		5	7.00	1.30	0.15	6.83		
							10.43	**5900.40**	**61511.00**
	Basic Rate	5364.00							
	Area Weightage @ 10%	536.40							
	Final Rate	**5900.40**							
10	**Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) (Page 15/2.2.1.1) PWD SR 2021-22 (Vol-I)**								
	RCC M20	Cum							
	Raft								
	Yogesh Nagara, 1st cross Opp Road		1	20.00	0.90	0.15	2.70		
	Culverts		5	7.00	1.00	0.20	7.00		
	Drain wall								
	Yogesh Nagara, 1st cross Opp Road		2	20.00	0.15	0.60	3.60		
	Culverts		10	7.00	0.20	0.60	8.40		
				Total Culvert QTY			**21.70**		
							21.70	**7196.81**	**156170.00**
	Basic Rate	6231.00							
	Additionalities for Formwork, Centering & Scaffolding (5%)	311.55							
	Sub Total	6542.55							
	Area Weightage @ 10%	654.26							

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	150.00 Rate	Lakhs Amount
11	Final Rate	7196.81							
	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.(V-III, I.No 13.1 Page No 99, PWD SR 2021-22)								
	TMT Steel FE500	Ton							
	For RCC Drain								
	Total RCC Quantity =	Cum					**6.30**		
	For 1 CUM = 60	Kg					60.00		
		Kg					**378.00**		
	For Culvert								
	Total RCC Quantity =	Cum					**15.40**		
	For 1 CUM = 90	Kg					90.00		
		Kg					**1386.00**		
				Total Culvert QTY			**1.76**	**113661.90**	**200499.00**
	Basic Rate	103329.00							
	Area Weightage @ 10%	10,332.90							
	Final Rate	**113661.90**							
12	**Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate**								
	Covering Slab for Drain	Sqm							
	Yogesh Nagara, 1st cross Opp Road		1	20.00	0.90		18.00		
	20% of Item No 1						**444.42**		
							462.42	**2072.00**	**958134.00**
	Data Rate	2072.00							
	Total	**2072.00**							
13	**Providing precast slab of 230 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate**								
	Covering Slab for Culverts	Sqm							
	Culverts		5	7.00	1.00		35.00		
							35.00	**5037.00**	**176295.00**
	Data Rate	5037.00							
	Total	**5037.00**							
14	**Providing and fixing pre cast solid cement concrete kerb stones made out of M20 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete as directed by the Engineer in Charge of the work (Approved Rate)**								
	Kerb Stones	Mtr							
	Yogesh Nagara, 1st cross Opp Road		1	20.00			20.00		
	20% of Item No 2						428.00		
				Total			**996.00**	**507.00**	**504972.00**
	Basic Rate	507.00							
	Total	**507.00**							
15	**Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work ((V-I, P.No-8, I No-1.12 of PWD SR 2021-22)**								
	Earth work excavation (By Manual Means)	Cum							

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	150.00 Rate	Lakhs Amount
	Yogesh Nagara, 1st Cross								
			1	25.00	3.50	0.30	26.25		
							26.25	**71.50**	**1876.00**
	Basic Rate	65.00							
	Area Weightage @ 10%	6.50							
	Total	**71.50**							
16	**Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Page No. 24/ Item No. 4.27/ PWD SR 2021-22 (Vol-III).**								
	Wet Mix	Cum							
	Yoesh Nagara Main Road		1	200.00	9.50	0.23	437.00		
							437.00		
	Yoesh Nagara Main Road		1	450.00	9.50	0.23	983.25		
	Nethaji Nagara, 2nd Main Road		1	135.00	4.00	0.23	124.20		
	Nethaji Nagara, 3rd Main Road		1	135.00	4.00	0.23	124.20		
	Amrutahalli, 4th cross		1	100.00	5.00	0.23	115.00		
	Amrutahalli, 3rd cross		1	280.00	5.30	0.23	341.32		
	Amrutahalli, 3rd A cross		1	40.00	6.00	0.23	55.20		
	Muneshwara Gowdana Layout, 1st Main Road		1	152.00	5.50	0.23	192.28		
							1935.45		
				Twenty Percent for Profile Correction			**387.09**		
							824.09	**2633.40**	**2170158.00**
	Basic Rate	2394.00							
	Area Weightage @ 10%	239.40							
	Total	**2633.40**							
17	**Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means. (P.No.29 It.No.5.1, PWD SR 2021-22 (Vol-III))**								
	Prime coat	Sqm							
	Yoesh Nagara Main Road		1	200.00	9.50		1900.00		
							1900.00	**48.40**	**91960.00**
	Basic Rate	44.00							
	Area Weightage @ 10%	4.40							
	Final Rate	**48.40**							
18	**Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.20 kg/m2 on the prepared bituminous surface cleaned with mechanical broom (P.No.29 It.No.5.3, PWD SR 2021-22 (Vol-III))**								
	Tack coat	Sqm							
	Yoesh Nagara Main Road		1	650.00	9.50		6175.00		
	Nethaji Nagara, 2nd Main Road		1	135.00	4.00		540.00		
	Nethaji Nagara, 3rd Main Road		1	135.00	4.00		540.00		
	Amrutahalli, 4th cross		1	100.00	5.00		500.00		
	Amrutahalli, 3rd cross		1	280.00	5.30		1484.00		
	Amrutahalli, 3rd A cross		1	40.00	6.00		240.00		
	Muneshwara Gowdana Layout, 1st Main Road		1	152.00	5.50		836.00		

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	150.00 Rate	Lakhs Amount
							10315.00	**13.20**	**136158.00**
	Basic Rate	12.00							
	Area Weightage @ 10%	1.20							
	Final Rate	**13.20**							
19	**Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects.(Grade-II) (Pg:33, It.No-5.12 C PWD SR:2021-22 (Vol-III))**								
	Dense Graded Bituminous Mecadam (DBM)	Cum							
	Yoesh Nagara Main Road		1	450.00	9.50	0.05	213.75		
	Nethaji Nagara, 2nd Main Road		1	135.00	4.00	0.05	27.00		
	Nethaji Nagara, 3rd Main Road		1	135.00	4.00	0.05	27.00		
	Muneshwara Gowdana Layout, 1st Main Road		1	152.00	5.50	0.05	41.80		
							309.55		
				Twenty Percent for Profile Correction			**61.91**		
	Amrutahalli, 4th cross		1	100.00	5.00	0.05	25.00		
	Amrutahalli, 3rd cross		1	280.00	5.30	0.05	74.20		
	Amrutahalli, 3rd A cross		1	40.00	6.00	0.05	12.00		
				Thirty Percent for Profile Correction			**33.36**		
	Yoesh Nagara Main Road		1	200.00	9.50	0.05	95.00		
							95.00		
							190.27	**10877.90**	**2069738.00**
	Basic Rate	9889.00							
	Area Weightage @ 10%	988.90							
	Final Rate	**10877.90**							
20	**Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using Crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respec (Pg:36, It.No-5.16 C PWD SR:2021-22 (Vol-III))**								
	Bituminous Concrete (BC)	Cum							
	Yoesh Nagara Main Road		1	650.00	9.50	0.04	247.00		
	Nethaji Nagara, 2nd Main Road		1	135.00	4.00	0.04	21.60		
	Nethaji Nagara, 3rd Main Road		1	135.00	4.00	0.04	21.60		
	Muneshwara Gowdana Layout, 1st Main Road		1	152.00	5.00	0.04	30.40		
	Amrutahalli, 4th cross		1	100.00	5.00	0.04	20.00		
	Amrutahalli, 3rd cross		1	280.00	5.30	0.04	59.36		
	Amrutahalli, 3rd A cross		1	40.00	6.00	0.04	9.60		
							409.56	**12684.10**	**5194899.00**
	Basic Rate	11531.00							
	Area Weightage @ 10%	1,153.10							
	Final Rate	**12684.10**							
21	**Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes. Page No. 57/ Item No. 8.15 PWD SR 2021-22 (Vol-III).**								

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	150.00 Rate	Lakhs Amount
	Road Marking	Sqm							
	Yoesh Nagara Main Road		2	650.00	0.10		130.00		
	Nethaji Nagara, 2nd Main Road		2	135.00	0.10		27.00		
	Nethaji Nagara, 3rd Main Road		2	135.00	0.10		27.00		
	Muneshwara Gowdana Layout, 1st Main Road		2	152.00	0.10		30.40		
	Amrutahalli, 4th cross		2	100.00	0.10		20.00		
	Amrutahalli, 3rd cross		2	280.00	0.10		56.00		
	Amrutahalli, 3rd A cross		2	40.00	0.10		8.00		
							298.40	**525.80**	**156898.00**
	Basic Rate	478.00							
	Area Weightage @ 10%	47.80							
	Total	**525.80**							
22	**Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Page No. 15/ Item No. 2.1.1/ PWD SR 2021-22 (Vol-I).**								
	PCC 1:5:10	Cum							
	Yogesh Nagara, 1st cross Road		1	25.00	3.50	0.15	13.13		
	Yogesh Nagara, 3rd cross		1	25.00	4.50	0.15	16.88		
							30.00	**5473.60**	**164208.00**
	Basic Rate	4976.00							
	Area Weightage @ 10%	497.60							
	Final Rate	**5473.60**							
23	**Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, , primer, sealant , curing of concrete slabs for 14- days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete. as per the directions of the Engineer-in-charge of the work. Page No. 138/ Item No. 20.29/ PWD SR 2021-22 (Vol-III).**								
	PCC M30	Cum							
	Yogesh Nagara, 1st cross Road		1	25.00	3.50	0.15	13.13		
	Yogesh Nagara, 3rd cross		1	25.00	4.50	0.15	16.88		
							30.00	**7520.70**	**225621.00**
	Basic Rate	6837.00							
	Area Weightage @ 10%	683.70							
	Final Rate	**7520.70**							
24	**Cost of Haulage Excluding Loading and Unloading Taking output 25 t load and lead 10 km = 250 t.km (Vol-III) Page No.3, Item No.1.4C of PWD SR 2021-22**								
	Cost of Haulage	Mtr							
	Qty frm Item No-2						**509.25**		
	Qty frm Item No-10						**26.25**		

	Job no:-						Est .Cost Rs.	150.00	Lakhs
Sl No	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
							685.43	44.00	30159.00
	Basic Rate	5.00							
	8KM Lead = 5*8	40.00							
	Area Weightage 10%	4.00							
	Total Rate	**44.00**							
	Sub Total								13121033.00
	GST 12.0%								1574523.96
	For DPR and PMC Charges 2.0%								300000.00
	Sub Total								14995556.96
	Miscellaneous								4443.04
	Total								15000000.00

CERTIFICATE

1 The Work spot has been inspected and the work found to be necessary
2 The Estimate is prepared as per the PWD SR 2021-22 (Vol-I and Vol-III)
3 The Provision made in estimate are adequate and essential
4 This area comes under
BBMP limits.

Assistant Engineer
Ward No:07
BBMP

Asst Executive Engineer
Sahakaranagara Sub-Division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP

Bruhat Bengaluru
Mahanagara Palike

BRUHAT BENGALURU MAHANAGARA PALIKE (BBMP)

ESTIMATE

NAME OF WORK: **Improvements to Roads and Drains of Coffee Board Layout in Ward no: 07 Bytarayanapura.**

ESTIMATE AMOUNT RS:- 30000000.00

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BRUHAT BENGALURU MAHANAGARA PALIKE

BYATARAYANAPURA

NAME OF WORK: Improvements to Roads and Drains of Coffee Board Layout in Ward no: 07 Bytarayanapura.

Job no:-

Sl No	Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	300.00 Rate	Lakhs Amount
1	**Removing and resetting of footpath slab**								
	For Covering Slabs	Sqm							
	11th Cross From Pragati Condiments (W1023)								
	LHS		1	327.70	0.90		294.93		
	RHS		1	327.70	0.90		294.93		
	4th Main Road, 11th Cross (W0790)								
	LHS		1	120.00	0.90		108.00		
	RHS		1	120.00	0.90		108.00		
	5th Main Road ,8th Cross Towards North (W0786)								
	LHS		1	81.30	0.90		73.17		
	RHS		1	81.30	0.90		73.17		
	5th Main Road ,8th Cross Towards South (W0786)								
	LHS		1	205.90	0.90		185.31		
	Cross Roads		-1	18.00			-18.00		
	RHS		1	205.90	0.90		185.31		
	Cross Roads		-1	27.00			-27.00		
	6th Main road 11th cross (W0784)								
	LHS		1	91.80	0.90		82.62		
	RHS		1	91.80	0.90		82.62		
	9th Cross Road (W1019)								
	LHS		1	76.60	0.90		68.94		
	RHS		1	76.60	0.90		68.94		
	4th Main Road ,4th Cross (W0788)								
	LHS		1	166.50	0.90		149.85		
	RHS		1	166.50	0.90		149.85		
	7th Cross Road (W1013)								
	LHS		1	284.70	0.90		256.23		
	Cross Roads		-1	48.00			-48.00		
	RHS		1	284.70	0.90		256.23		
	Cross Roads		-1	9.00			-9.00		
	11th Main Road (W0760)								
	LHS		1	229.60	0.90		206.64		
	Cross Roads		-1	9.40			-9.40		
	RHS		1	229.60	0.90		206.64		
	10th Main Road (W0762)								
	LHS		1	182.50	0.90		164.25		
	RHS		1	182.50	0.90		164.25		
	4th Cross Road (W1003)								
	LHS		1	357.50	0.90		321.75		
	RHS		1	357.50	0.90		321.75		
	4th main road, 5th cross (W1007)								
	LHS		1	354.60	0.90		319.14		
	RHS		1	354.60	0.90		319.14		
	8th Cross Road (W1015)								
	LHS		1	387.70	0.90		348.93		
	RHS		1	387.70	0.90		348.93		

Sl No	Job no:-						Est .Cost Rs.	300.00	Lakhs
	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
	2nd Main Road balaji layout (W0736)								
	LHS		1	208.50	0.90		187.65		
	Cross Road		-1	6.00			-6.00		
	RHS		1	208.50	0.90		187.65		
	Cross Road		-1	7.00			-7.00		
	5th Main Road, 1st Cross (W0993)								
	LHS		1	88.00	0.90		79.20		
	RHS		1	88.00	0.90		79.20		
	5th Main Road Cycle Shop Road (W0993)								
	LHS		1	34.00	0.90		30.60		
	RHS		1	34.00	0.90		30.60		
	From SMS Light Appartment Road (W0995)								
	LHS		1	124.90	0.90		112.41		
	RHS		1	124.90	0.90		112.41		
							5854.84		
							965.40		
							4889.44	**246.70**	**1206223.00**
2	**Earth work excavation by manual means for drains,canals and similar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Page No. 7/ Item No. 1.4.1/ PWD SR 2021-22 (Vol-I)**								
	Desilting	Cum							
	11th Cross From Pragati Condiments (W1023)								
	LHS		1	327.70	0.60	0.45	88.48		
	RHS		1	327.70	0.60	0.45	88.48		
	4th Main Road, 11th Cross (W0790)								
	LHS		1	120.00	0.60	0.45	32.40		
	RHS		1	120.00	0.60	0.45	32.40		
	5th Main Road ,8th Cross Towards North (W0786)								
	LHS		1	81.30	0.60	0.45	21.95		
	RHS		1	81.30	0.60	0.45	21.95		
	5th Main Road ,8th Cross Towards South (W0786)								
	LHS		1	205.90	0.60	0.45	55.59		
	Cross Roads		-1	18.00	0.60	0.45	-4.86		
	RHS		1	205.90	0.60	0.45	55.59		
	Cross Roads		-1	27.00	0.60	0.45	-7.29		
	6th Main road 11th cross (W0784)								
	LHS		1	91.80	0.60	0.45	24.79		
	RHS		1	91.80	0.60	0.45	24.79		
	9th Cross Road (W1019)								
	LHS		1	76.60	0.60	0.45	20.68		
	RHS		1	76.60	0.60	0.30	13.79		
	4th Main Road ,4th Cross (W0788)								
	LHS		1	166.50	0.60	0.45	44.96		
	RHS		1	166.50	0.60	0.45	44.96		

Sl No	Job no:-						Est .Cost Rs.	300.00	Lakhs
	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
	7th Cross Road (W1013)								
	LHS		1	284.70	0.60	0.45	76.87		
	Cross Roads		-1	48.00	0.60	0.45	-12.96		
	RHS		1	284.70	0.60	0.45	76.87		
	Cross Roads		-1	9.00	0.60	0.45	-2.43		
	11th Main Road (W0760)								
	LHS		1	229.60	0.60	0.45	61.99		
	Cross Roads		-1	9.40	0.60	0.45	-2.54		
	RHS		1	229.60	0.60	0.45	61.99		
	10th Main Road (W0762)								
	LHS		1	182.50	0.60	0.45	49.28		
	RHS		1	182.50	0.60	0.45	49.28		
	4th Cross Road (W1003)								
	LHS		1	357.50	0.60	0.45	96.53		
	RHS		1	357.50	0.60	0.45	96.53		
	4th main road, 5th cross (W1007)								
	LHS		1	354.60	0.60	0.45	95.74		
	RHS		1	354.60	0.60	0.45	95.74		
	8th Cross Road (W1015)								
	LHS		1	387.70	0.60	0.45	104.68		
	RHS		1	387.70	0.60	0.45	104.68		
	2nd Main Road balaji layout (W0736)								
	LHS		1	208.50	0.60	0.45	56.30		
	Cross Road		-1	6.00	0.60	0.45	-1.62		
	RHS		1	208.50	0.60	0.45	56.30		
	Cross Road		-1	7.00	0.60	0.45	-1.89		
	5th Main Road, 1st Cross (W0993)								
	LHS		1	88.00	0.60	0.45	23.76		
	RHS		1	88.00	0.60	0.50	26.40		
	5th Main Road Cycle Shop Road (W0993)								
	LHS		1	30.00	0.60	0.50	9.00		
			1	4.00	0.60	0.40	0.96		
	RHS		1	34.00	0.60	0.50	10.20		
	From SMS Light Appartment Road (W0995)								
	LHS		1	124.90	0.60	0.55	41.22		
	RHS		1	60.00	0.60	0.55	19.80		
			1	64.90	0.60	0.45	17.52		
							1768.82	**351.05**	**620945.00**
3	**Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate**								
	Covering Slab for Drain	Sqm							
	In Coffee Board Layout		1	1177.00	0.90		**1059.30**		
							1059.30	**2175.19**	**2304178.00**
4	**Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work (Vol-I, P.No-8, I No-1.12 of PWD SR 2021-22)**								

Sl No	Job no:-					Est .Cost Rs.	300.00	Lakhs
	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
	Earthwork Mechanical Means	Cum							
	11th Cross From Pragati Condiments (W1023)		1	327.70	8.00	0.25	655.40		
	4th Main Road, 11th Cross (W0790)		1	120.00	6.00	0.25	180.00		
	5th Main Road ,8th Cross Towards North (W0786)		1	81.30	8.00	0.25	162.60		
	5th Main Road ,8th Cross Towards South (W0786)		1	205.90	8.00	0.25	411.80		
	6th Main road 11th cross (W0784)		1	91.80	8.00	0.25	183.60		
	9th Cross Road (W1019)		1	76.60	6.86	0.25	131.37		
	4th Main Road ,4th Cross (W0788)		1	166.50	7.50	0.25	312.19		
	7th Cross Road (W1013)		1	284.70	7.00	0.25	498.23		
	11th Main Road (W0760)		1	229.60	6.50	0.25	373.10		
	10th Main Road (W0762)		1	182.50	8.00	0.25	365.00		
	4th Cross Road (W1003)		1	357.50	8.00	0.25	715.00		
	4th main road, 5th cross (W1007)		1	354.60	7.00	0.25	620.55		
	8th Cross Road (W1015)		1	387.70	7.00	0.25	678.48		
	2nd Main Road balaji layout (W0736)		1	208.50	7.50	0.25	390.94		
	5th Main Road, 1st Cross (W0993)		1	88.00	8.00	0.25	176.00		
	5th Main Road Cycle Shop Road (W0993)		1	34.00	8.00	0.25	68.00		
	From SMS Light Appartment Road (W0995)		1	124.90	7.50	0.25	234.19		
							6156.43		
				25% for Profile Correction			**1539.11**		
							1539.11	**75.06**	**115525.00**
5	**Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Page No. 24/ Item No. 4.27/ PWD SR 2021-22 (Vol-III).**								
	Wet Mix	Cum							
	11th Cross From Pragati Condiments (W1023)		1	327.70	8.00	0.23	602.97		
	4th Main Road, 11th Cross (W0790)		1	120.00	6.00	0.23	165.60		
	5th Main Road ,8th Cross Towards North (W0786)		1	81.30	8.00	0.23	149.59		
	5th Main Road ,8th Cross Towards South (W0786)		1	205.90	8.00	0.23	378.86		
	6th Main road 11th cross (W0784)		1	91.80	8.00	0.23	168.91		
	9th Cross Road (W1019)		1	76.60	6.86	0.23	120.86		
	4th Main Road ,4th Cross (W0788)		1	166.50	7.50	0.23	287.21		
	7th Cross Road (W1013)		1	284.70	7.00	0.23	458.37		
	11th Main Road (W0760)		1	229.60	6.50	0.23	343.25		
	10th Main Road (W0762)		1	182.50	8.00	0.23	335.80		
	4th Cross Road (W1003)		1	357.50	8.00	0.23	657.80		

Job no:-

Sl No	Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	300.00 Rate	Lakhs Amount
	4th main road, 5th cross (W1007)		1	354.60	7.00	0.23	570.91		
	8th Cross Road (W1015)		1	387.70	7.00	0.23	624.20		
	2nd Main Road balaji layout (W0736)		1	208.50	7.50	0.23	359.66		
	5th Main Road, 1st Cross (W0993)		1	88.00	8.00	0.23	161.92		
	5th Main Road Cycle Shop Road (W0993)		1	34.00	8.00	0.23	62.56		
	From SMS Light Appartment Road (W0995)		1	124.90	7.50	0.23	215.45		
							5663.92		
				25% for Profile Correction			**1415.99**		
							1415.99	**2764.54**	**3914562.00**
6	**Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means. (P.No.29 It.No.5.1, PWD SR 2021-22 (Vol-III))**								
	Prime Coat	Cum							
	11th Cross From Pragati Condiments (W1023)		1	327.70	8.00		2621.60		
	4th Main Road, 11th Cross (W0790)		1	120.00	6.00		720.00		
	5th Main Road ,8th Cross Towards North (W0786)		1	81.30	8.00		650.40		
	5th Main Road ,8th Cross Towards South (W0786)		1	205.90	8.00		1647.20		
	6th Main road 11th cross (W0784)		1	91.80	8.00		734.40		
	9th Cross Road (W1019)		1	76.60	6.86		525.48		
	4th Main Road ,4th Cross (W0788)		1	166.50	7.50		1248.75		
	7th Cross Road (W1013)		1	284.70	7.00		1992.90		
	11th Main Road (W0760)		1	229.60	6.50		1492.40		
	10th Main Road (W0762)		1	182.50	8.00		1460.00		
	4th Cross Road (W1003)		1	357.50	8.00		2860.00		
	4th main road, 5th cross (W1007)		1	354.60	7.00		2482.20		
	8th Cross Road (W1015)		1	387.70	7.00		2713.90		
	2nd Main Road balaji layout (W0736)		1	208.50	7.50		1563.75		
	5th Main Road, 1st Cross (W0993)		1	88.00	8.00		704.00		
	5th Main Road Cycle Shop Road (W0993)		1	34.00	8.00		272.00		
	From SMS Light Appartment Road (W0995)		1	124.90	7.50		936.75		
							24625.73		
				25% for Profile Correction			**6132.79**		
							6132.79	**48.50**	**297440.00**

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Sl No	Job no:- / Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	300.00 Rate	Lakhs Amount
7	**Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.20 kg/m2 on the prepared bituminous surface cleaned with mechanical broom (P.No.29 It.No.5.3, PWD SR 2021-22 (Vol-III))**								
	Tack coat	Sqm							
	11th Cross From Pragati Condiments (W1023)		1	327.70	8.00		2621.60		
	4th Main Road, 11th Cross (W0790)		1	120.00	6.00		720.00		
	5th Main Road ,8th Cross Towards North (W0786)		1	81.30	8.00		650.40		
	5th Main Road ,8th Cross Towards South (W0786)		1	205.90	8.00		1647.20		
	6th Main road 11th cross (W0784)		1	91.80	8.00		734.40		
	9th Cross Road (W1019)		1	76.60	6.86		525.48		
	4th Main Road ,4th Cross (W0788)		1	166.50	7.50		1248.75		
	7th Cross Road (W1013)		1	284.70	7.00		1992.90		
	11th Main Road (W0760)		1	229.60	6.50		1492.40		
	10th Main Road (W0762)		1	182.50	8.00		1460.00		
	4th Cross Road (W1003)		1	357.50	8.00		2860.00		
	4th main road, 5th cross (W1007)		1	354.60	7.00		2482.20		
	8th Cross Road (W1015)		1	387.70	7.00		2713.90		
	2nd Main Road balaji layout (W0736)		1	208.50	7.50		1563.75		
	5th Main Road, 1st Cross (W0993)		1	88.00	8.00		704.00		
	5th Main Road Cycle Shop Road (W0993)		1	34.00	8.00		272.00		
	From SMS Light Appartment Road (W0995)		1	124.90	7.50		936.75		
	Cross Rosd		1	60.00	7.73		463.80		
							25089.53	**13.86**	**347740.00**
8	**Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects.(Grade-II) (Pg:33, It.No-5.12 C PWD SR:2021-22 (Vol-III))**								
	Dense Graded Bituminous Mecadam (DBM)	Cum							
	11th Cross From Pragati Condiments (W1023)		1	327.70	8.00	0.05	131.08		
	4th Main Road, 11th Cross (W0790)		1	120.00	6.00	0.05	36.00		
	5th Main Road ,8th Cross Towards North (W0786)		1	81.30	8.00	0.05	32.52		
	5th Main Road ,8th Cross Towards South (W0786)		1	205.90	8.00	0.05	82.36		
	6th Main road 11th cross (W0784)		1	91.80	8.00	0.05	36.72		
	9th Cross Road (W1019)		1	76.60	6.86	0.05	26.27		
	4th Main Road ,4th Cross (W0788)		1	166.50	7.50	0.05	62.44		
	7th Cross Road (W1013)		1	284.70	7.00	0.05	99.65		
	11th Main Road (W0760)		1	229.60	6.50	0.05	74.62		
	10th Main Road (W0762)		1	182.50	8.00	0.05	73.00		
	4th Cross Road (W1003)		1	357.50	8.00	0.05	143.00		

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	300.00 Rate	Lakhs Amount
	4th main road, 5th cross (W1007)		1	354.60	7.00	0.05	124.11		
	8th Cross Road (W1015)		1	387.70	7.00	0.05	135.70		
	2nd Main Road balaji layout (W0736)		1	208.50	7.50	0.05	78.19		
	5th Main Road, 1st Cross (W0993)		1	88.00	8.00	0.05	35.20		
	5th Main Road Cycle Shop Road (W0993)		1	34.00	8.00	0.05	13.60		
	From SMS Light Appartment Road (W0995)		1	124.90	7.50	0.05	46.84		
							1231.29		
				25% for Profile Correction			**307.82**		
							307.82	**10553.53**	**3248604.00**
9	**Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using Crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respec (Pg:36, It.No-5.16 C PWD SR:2021-22 (Vol-III))**								
	Bituminous Concrete (BC)	Cum							
	11th Cross From Pragati Condiments (W1023)		1	327.70	8.00	0.04	104.86		
	4th Main Road, 11th Cross (W0790)		1	120.00	6.00	0.04	28.80		
	5th Main Road ,8th Cross Towards North (W0786)		1	81.30	8.00	0.04	26.02		
	5th Main Road ,8th Cross Towards South (W0786)		1	205.90	8.00	0.04	65.89		
	6th Main road 11th cross (W0784)		1	91.80	8.00	0.04	29.38		
	9th Cross Road (W1019)		1	76.60	6.86	0.04	21.02		
	4th Main Road ,4th Cross (W0788)		1	166.50	7.50	0.04	49.95		
	7th Cross Road (W1013)		1	284.70	7.00	0.04	79.72		
	11th Main Road (W0760)		1	229.60	6.50	0.04	59.70		
	10th Main Road (W0762)		1	182.50	8.00	0.04	58.40		
	4th Cross Road (W1003)		1	357.50	8.00	0.04	114.40		
	4th main road, 5th cross (W1007)		1	354.60	7.00	0.04	99.29		
	8th Cross Road (W1015)		1	387.70	7.00	0.04	108.56		

Sl No	Job no:-						Est .Cost Rs.	300.00	Lakhs
	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
	2nd Main Road balaji layout (W0736)		1	208.50	7.50	0.04	62.55		
	5th Main Road, 1st Cross (W0993)		1	88.00	8.00	0.04	28.16		
	5th Main Road Cycle Shop Road (W0993)		1	34.00	8.00	0.04	10.88		
	From SMS Light Appartment Road (W0995)		1	124.90	7.50	0.04	37.47		
	Cross Rosd		1	60.00	7.73	0.04	18.55		
							1003.6	**12253.37**	**12297249.00**
10	**Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes. Page No. 57/ Item No. 8.15 PWD SR 2021-22 (Vol-III).**								
	Road Marking	Sqm							
	11th Cross From Pragati Condiments (W1023)		2	327.70	0.10		65.54		
	4th Main Road, 11th Cross (W0790)		2	120.00	0.10		24.00		
	5th Main Road ,8th Cross Towards North (W0786)		2	81.30	0.10		16.26		
	5th Main Road ,8th Cross Towards South (W0786)		2	205.90	0.10		41.18		
	6th Main road 11th cross (W0784)		2	91.80	0.10		18.36		
	9th Cross Road (W1019)		2	76.60	0.10		15.32		
	4th Main Road ,4th Cross (W0788)		2	166.50	0.10		33.30		
	7th Cross Road (W1013)		2	284.70	0.10		56.94		
	11th Main Road (W0760)		2	229.60	0.10		45.92		
	10th Main Road (W0762)		2	182.50	0.10		36.50		
	4th Cross Road (W1003)		2	357.50	0.10		71.50		
	4th main road, 5th cross (W1007)		2	354.60	0.10		70.92		
	8th Cross Road (W1015)		2	387.70	0.10		77.54		
	2nd Main Road balaji layout (W0736)		2	208.50	0.10		41.70		
	5th Main Road, 1st Cross (W0993)		2	88.00	0.10		17.60		
	5th Main Road Cycle Shop Road (W0993)		2	34.00	0.10		6.80		
	From SMS Light Appartment Road (W0995)		2	124.90	0.10		24.98		
							664.36	**551.98**	**366713.00**
11	**Cost of Haulage Excluding Loading and Unloading Taking output 25 t load and lead 10 km = 250 t.km (Vol-III) Page No.3, Item No.1.4C of PWD SR 2021-22**								
	Cost of Haulage	Mtr							
							1768.82		
	Qty frm Item No-2						**1539.11**		
	Qty frm Item No-4						**4234.2**	**46.19**	**195575.00**
									24914754.00
	Sub Total								**4484655.72**
	GST 18.0%								

Sl No	Job no:-					Est .Cost Rs.	300.00	Lakhs
	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
	For DPR and PMC Charges 2.0%								600000.00
	Sub Total								29993490.56
	Miscellaneous								6509.44
	Total								30000000.00

CERTIFICATE

1 The Work spot has been inspected and the work found to be necessary
2 The Estimate is prepared as per the PWD SR 2021-22 (Vol-I and Vol-III)
3 The Provision made in estimate are adequate and essential
4 This area comes under
BBMP limits.

Assistant Engineer
Ward No:07
BBMP

Asst Executive Engineer
Sahakaranagara Sub-Division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP

Bruhat Bengaluru Mahanagara Palike

BRUHAT BENGALURU MAHANAGARA PALIKE (BBMP)

ESTIMATE

NAME OF WORK: **Improvements to Roads and Drains From Dasarahalli Main Road to Coffee Board Layout Main Road in Ward no: 07 Bytarayanapura.**

ESTIMATE AMOUNT RS:- 15000000.00

BRUHAT BENGALURU MAHANAGARA PALIKE

BYATARAYANAPURA

NAME OF WORK: Improvements to Roads and Drains From Dasarahalli Main Road to Coffee Board Layout Main Road in Ward no: 07 Bytarayanapura.

Job no:-

Est .Cost Rs. 150.00 Lakhs

Sl No	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
1	**Removing and resetting of footpath slab**								
	For Covering Slabs	Sqm							
	Chinnappa Layout, 1st Main		2	185.00	0.90		333.00		
	Dasarahalli Main Road		2	235.00	0.90		423.00		
	Muneshwara Block, 3rd Main Road		2	305.00	0.90		549.00		
	Dasarahalli to Coffee Board Main Road		2	275.00	0.90		495.00		
	Amrutahalli, 7th cross		2	106.00	0.90		190.80		
	Amrutahalli, 6th cross		2	80.00	0.90		144.00		
	Vinayaka Layout, 1st A Main Road		2	480.00	0.90		864.00		
							2998.80		
	20% missing Covering Slabs						**599.76**		
							2399.04	**235.00**	**563774.00**
	Approved Rate	235.00							
		235.00							
2	**Removing and resetting of Kerb Stones**								
	For Kerb Stones	Mtr							
	Amrutahalli, 7th cross		2	106.00			212.00		
	Amrutahalli, 6th cross		2	80.00			160.00		
							372.00		
	20% missing Covering Slabs						**74.40**		
							297.60	**118.00**	**35116.00**
	Approved Rate	118.00							
		118.00							
3	**Dismantling of cement concrete pavement by mechanical meansusing pneumatic tools, breaking to pieces not exceeding 0.02 m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separately (Page No.9 & Item No.2.19)PWD SR 2021-22 (Vol-III)**								
	Dismantling of Cement Concrete Pavement	Cum							
	CC Road								
	Mariyannapalya, 1st Cross		1	0.00	4.00	0.30	0.00		
							0.00	**464.20**	**0.00**
	Basic Rate	422.00							
	Area Weightage @ 10%	42.20							
	Final Rate	**464.20**							
4	**Dismantling of Flexible pavements and disposal of dismantled materials and stacking serviceable and unserviceable materials separately(Page No.10 & Item No.2.18 II A)PWD SR 2021-22 (Vol-III)**								
	Dismantling of Flexible Pavements	Cum							
	II. By Mechanical Means A. Bituminous course								
	Asphalt Road								

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	150.00 Rate	Lakhs Amount
	Chinnappa Layout, 1st Main		1	185.00	4.50	0.10	83.25		
	Amrutahalli, 7th cross		1	106.00	4.30	0.10	45.58		
							128.83	**221.10**	**28484.00**
	Basic Rate	201.00							
	Area Weightage @ 10%	20.10							
	Final Rate	**221.10**							
5	**Dismantling of Flexible pavements and disposal of dismantled materials and stacking serviceable and unserviceable materials separately(Page No.9 & Item No.2.18 II B)PWD SR 2021-22 (Vol-III)**								
	Dismantling of Flexible Pavements	Cum							
	II. By Mechanical Means B. Granular courses								
	Asphalt Road								
	Chinnappa Layout, 1st Main		1	185.00	4.50	0.23	191.48		
	Amrutahalli, 7th cross		1	106.00	4.30	0.23	104.83		
							296.31	**40.70**	**12059.00**
	Basic Rate	37.00							
	Area Weightage @ 10%	3.70							
	Final Rate	**40.70**							
6	**Earth work excavation by manual means for drains,canals and similar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Page No. 7/ Item No. 1.4.1/ PWD SR 2021-22 (Vol-I)**								
	Desilting	Cum							
	Chinnappa Layout, 1st Main		2	185.00	0.60	0.30	66.60		
	Dasarahalli Main Road		2	235.00	0.60	0.30	84.60		
	Muneshwara Block, 3rd Main Road		2	305.00	0.60	0.30	109.80		
	Dasarahalli to Coffee Board Main Road		2	275.00	0.60	0.30	99.00		
	Amrutahalli, 7th cross		2	106.00	0.60	0.30	38.16		
	Amrutahalli, 6th cross		2	80.00	0.60	0.30	28.80		
	Vinayaka Layout, 1st A Main Road		2	480.00	0.60	0.30	172.80		
	RCC Drain	Cum							
	Culverts		5	7.00	1.30	0.95	43.23		
							576.39	**334.40**	**192743.00**
	Basic Rate	186.00							
	Loading and Unloading	118.00							
	Sub Total	**304.00**							
	Area Weightage @ 10%	30.40							
		334.40							
7	**Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately (Page No.15 & Item No.2.1.2)PWD SR 2021-22 (Vol-III)**								
	PCC 1:4:8	Cum							

Sl No	Job no:-					Est .Cost Rs.	150.00	Lakhs
	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
	Culverts								
			5	7.00	1.30	0.15	6.83		
							6.83	**5900.40**	**40270.00**
	Basic Rate	5364.00							
	Area Weightage @ 10%	536.40							
	Final Rate	**5900.40**							
8	**Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) (Page 15/2.2.1.1) PWD SR 2021-22 (Vol-I)**								
	RCC M20	Cum							
	Raft								
	Culverts		5	7.00	1.00	0.20	7.00		
	Drain wall								
	Culverts		10	7.00	0.20	0.60	8.40		
					Total Culvert QTY		**15.40**		
							15.40	**7196.81**	**110830.00**
	Basic Rate	6231.00							
	Additionalities for Formwork, Centering & Scaffolding (5%)	311.55							
	Sub Total	6542.55							
	Area Weightage @ 10%	654.26							
	Final Rate	**7196.81**							
9	**Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.(V-III, I.No 13.1 Page No 99, PWD SR 2021-22)**								
	TMT Steel FE500	Ton							
	For Culvert								
	Total RCC Quantity =	Cum					**15.40**		
	For 1 CUM = 90	Kg					90.00		
		Kg					**1386.00**		
					Total Culvert QTY		**1.39**	**113661.90**	**157535.00**
	Basic Rate	103329.00							
	Area Weightage @ 10%	10,332.90							
	Final Rate	**113661.90**							
10	**Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate**								
	Covering Slab for Drain	Sqm							
	20% of Item No 1						**599.76**		
							599.76	**2072.00**	**1242702.00**
	Data Rate	2072.00							
	Total	**2072.00**							
11	**Providing precast slab of 230 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate**								
	Covering Slab for Culverts	Sqm							
	Culverts		5	7.00	1.00		35.00		
							35.00	**5037.00**	**176295.00**

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	150.00 Rate	Lakhs Amount
	Data Rate	5037.00							
12	Total	**5037.00**							
	Providing and fixing pre cast solid cement concrete kerb stones made out of M20 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete as directed by the Engineer in Charge of the work (Approved Rate)								
	Kerb Stones	Mtr							
	20% of Item No 2						74.40		
					Total		**165.00**	**507.00**	**83655.00**
	Basic Rate	507.00							
	Total	**507.00**							
13	**Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work ((V-I, P.No-8, I No-1.12 of PWD SR 2021-22)**								
	Earth work excavation (By Manual Means)	Cum							
	Mariyannapalya, 1st Cross		1	115.00	4.00	0.30	138.00		
	Mariyannapalya, 2nd Cross		1	80.00	5.50	0.30	132.00		
	Chinnappa Layout,1st Main		1	185.00	4.70	0.30	260.85		
	Amrutahalli, 7th cross		1	106.00	4.30	0.30	136.74		
							667.59	**71.50**	**47732.00**
	Basic Rate	65.00							
	Area Weightage @ 10%	6.50							
	Total	**71.50**							
14	**Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Page No. 24/ Item No. 4.27/ PWD SR 2021-22 (Vol-III).**								
	Wet Mix	Cum							
	Amrutahalli, 7th cross		1	106.00	4.30	0.23	104.83		
							104.83		
	Dasarahalli Main Road		1	235.00	7.50	0.23	405.38		
	Muneshwara Block, 3rd Main Road		1	305.00	4.60	0.23	322.69		
	Dasarahalli to Coffee Board Main Road		1	275.00	6.50	0.23	411.13		
	Amrutahalli, 6th cross		1	80.00	7.00	0.23	128.80		
	Vinayaka Layout, 1st A Main Road		1	480.00	5.10	0.23	563.04		
							1831.03		
				Twenty Percent for Profile Correction			**366.21**		
							471.04	**2633.40**	**1240436.00**
	Basic Rate	2394.00							
	Area Weightage @ 10%	239.40							
	Total	**2633.40**							

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	150.00 Rate	Lakhs Amount
15	**Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means. (P.No.29 It.No.5.1, PWD SR 2021-22 (Vol-III))**								
	Prime coat	Sqm							
	Amrutahalli, 7th cross		1	106.00	4.30		455.80		
							455.80	**48.40**	**22060.00**
	Basic Rate	44.00							
	Area Weightage @ 10%	4.40							
	Final Rate	**48.40**							
16	**Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.20 kg/m2 on the prepared bituminous surface cleaned with mechanical broom (P.No.29 It.No.5.3, PWD SR 2021-22 (Vol-III))**								
	Tack coat	Sqm							
	Dasarahalli Main Road		1	235.00	7.50		1762.50		
	Muneshwara Block, 3rd Main Road		1	305.00	4.60		1403.00		
	Dasarahalli to Coffee Board Main Road		1	275.00	6.50		1787.50		
	Amrutahalli, 6th cross		1	80.00	7.00		560.00		
	Vinayaka Layout, 1st A Main Road		1	480.00	5.10		2448.00		
	Amrutahalli, 7th cross		1	106.00	4.30		455.80		
							8416.80	**13.20**	**111101.00**
	Basic Rate	12.00							
	Area Weightage @ 10%	1.20							
	Final Rate	**13.20**							
17	**Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects.(Grade-II) (Pg:33, It.No-5.12 C PWD SR:2021-22 (Vol-III))**								
	Dense Graded Bituminous Mecadam (DBM)	Cum							
	Dasarahalli Main Road		1	235.00	7.50	0.05	88.13		
	Muneshwara Block, 3rd Main Road		1	305.00	4.60	0.05	70.15		
	Dasarahalli to Coffee Board Main Road		1	275.00	6.50	0.05	89.38		
	Amrutahalli, 6th cross		1	80.00	7.00	0.05	28.00		
	Vinayaka Layout, 1st A Main Road		1	480.00	5.10	0.05	122.40		
							398.05		
				Twenty Percent for Profile Correction			**79.61**		
	Amrutahalli, 7th cross		1	106.00	4.30	0.05	22.79		
							22.79		
							102.40	**10877.90**	**1113896.00**
	Basic Rate	9889.00							
	Area Weightage @ 10%	988.90							
	Final Rate	**10877.90**							

Sl No	Job no:- Description of Items	Unit	No	L (M)	B (M)	D (M)	Est .Cost Rs. Qty	150.00 Rate	Lakhs Amount
18	**Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using Crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respec (Pg:36, It.No-5.16 C PWD SR:2021-22 (Vol-III))**								
	Bituminous Concrete (BC)	Cum							
	Dasarahalli Main Road		1	235.00	7.50	0.04	70.50		
	Muneshwara Block, 3rd Main Road		1	305.00	4.60	0.04	56.12		
	Dasarahalli to Coffee Board Main Road		1	275.00	6.50	0.04	71.50		
	Amrutahalli, 7th cross		1	106.00	4.30	0.04	18.23		
	Amrutahalli, 6th cross		1	80.00	7.00	0.04	22.40		
	Vinayaka Layout, 1st A Main Road		1	480.00	5.10	0.04	97.92		
							336.67	**12684.10**	**4270381.00**
	Basic Rate	11531.00							
	Area Weightage @ 10%	1,153.10							
	Final Rate	**12684.10**							
19	**Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes. Page No. 57/ Item No. 8.15 PWD SR 2021-22 (Vol-III).**								
	Road Marking	Sqm							
	Dasarahalli Main Road		2	235.00	0.10		47.00		
	Muneshwara Block, 3rd Main Road		2	305.00	0.10		61.00		
	Dasarahalli to Coffee Board Main Road		2	275.00	0.10		55.00		
	Amrutahalli, 7th cross		2	106.00	0.10		21.20		
	Amrutahalli, 6th cross		2	80.00	0.10		16.00		
	Vinayaka Layout, 1st A Main Road		2	480.00	0.10		96.00		
							296.20	**525.80**	**155741.00**
	Basic Rate	478.00							
	Area Weightage @ 10%	47.80							
	Total	**525.80**							
20	**Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Page No. 15/ Item No. 2.1.1/ PWD SR 2021-22 (Vol-I).**								
	PCC 1:5:10	Cum							
	Mariyannapalya, 1st Cross Road		1	115.00	4.00	0.15	69.00		
	Mariyannapalya, 2nd Cross Road		1	80.00	5.50	0.15	66.00		
	Chinnappa Layout, 1st Main road		1	185.00	4.70	0.15	130.43		
							265.43	**5473.60**	**1452830.00**
	Basic Rate	4976.00							
	Area Weightage @ 10%	497.60							
	Final Rate	**5473.60**							

Sl No	Job no:-						Est .Cost Rs.	150.00	Lakhs
	Description of Items	Unit	No	L (M)	B (M)	D (M)	Qty	Rate	Amount
21	**Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, , primer, sealant , curing of concrete slabs for 14- days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete. as per the directions of the Engineer-in-charge of the work. Page No. 138/ Item No. 20.29/ PWD SR 2021-22 (Vol-III).**								
	PCC M30	Cum							
	Mariyannapalya, 1st Cross Road		1	115.00	4.00	0.15	69.00		
	Mariyannapalya, 2nd Cross Road		1	80.00	5.50	0.15	66.00		
	Chinnappa Layout, 1st Main road		1	185.00	4.70	0.15	130.43		
							265.43	**7520.70**	**1996181.00**
	Basic Rate	6837.00							
	Area Weightage @ 10%	683.70							
	Final Rate	**7520.70**							
22	**Cost of Haulage Excluding Loading and Unloading Taking output 25 t load and lead 10 km = 250 t.km (Vol-III) Page No.3, Item No.1.4C of PWD SR 2021-22**								
	Cost of Haulage	Mtr							
	Qty frm Item No-2						**576.39**		
	Qty frm Item No-10						**667.59**		
							1592.29	**44.00**	**70060.00**
	Basic Rate	5.00							
	8KM Lead = 5*8	40.00							
	Area Weightage 10%	4.00							
	Total Rate	**44.00**							
	Sub Total								**13123881.00**
	GST 12.0%								**1574865.72**
	For DPR and PMC Charges 2.0%								**300000.00**
	Sub Total								**14998746.72**
	Miscellaneous								**1253.28**
	Total								**15000000.00**

CERTIFICATE

1 The Work spot has been inspected and the work found to be necessary

2 The Estimate is prepared as per the PWD SR 2021-22 (Vol-I and Vol-III)

3 The Provision made in estimate are adequate and essential

4 This area comes under BBMP limits.

Assistant Engineer
Ward No:06
BBMP

Asst Executive Engineer
Sahakaranagara Sub-Division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP

Abstract

Package No. 02 (Consists of 5 Works)

Name Of the Work	1. Improvements to roads and drains at Hegdenagara Westrent side balance cross roads in ward no. 06 Bytarayanapura Sub Division.	Rs. 200.00 Lakhs
	2. Improvements to roads and drains at Hegdenagara Eastern side roads in ward no. 06 Bytarayanapura Sub Division.	Rs. 200.00 Lakhs
	3. Improvements to roads and drains Nethajinagara and surrounding areas in ward no. 07 Byatarayanapura	Rs. 150.00 Lakhs
	4. Improvements to roads and drains in Coffee board layout in ward no. 07 Byatarayanapura	Rs. 300.00 Lakhs
	5. Improvements to roads and drains from Dasarahalli main road to Coffeeboard layout main road in ward no. 07 Byatarayanapura	Rs. 150.00 Lakhs
	Total	**Rs. 1000.00 Lakhs**

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂ.ಮ.ಪಾ, ಬೆಂಗಳೂರು

TECHNICAL Sanction
Accorded for Rs.1000.00 Lakhs only
Head of A/C..P.....
CER NO :...34..... Dt:.01.07.2022

EE

ADMINISTRATIVE APPROVAL
Accorded For Rs. 1000.00 Lakhs only
Head of A/c. P3877 Amritha Nagara
Div. Ref. No. 30/22-23 Date 14/10/22

AE

EE(BTP)